

Fig. 1

Ignition temperature as a function of carbon chain length (Zabetakis et al., 1954)

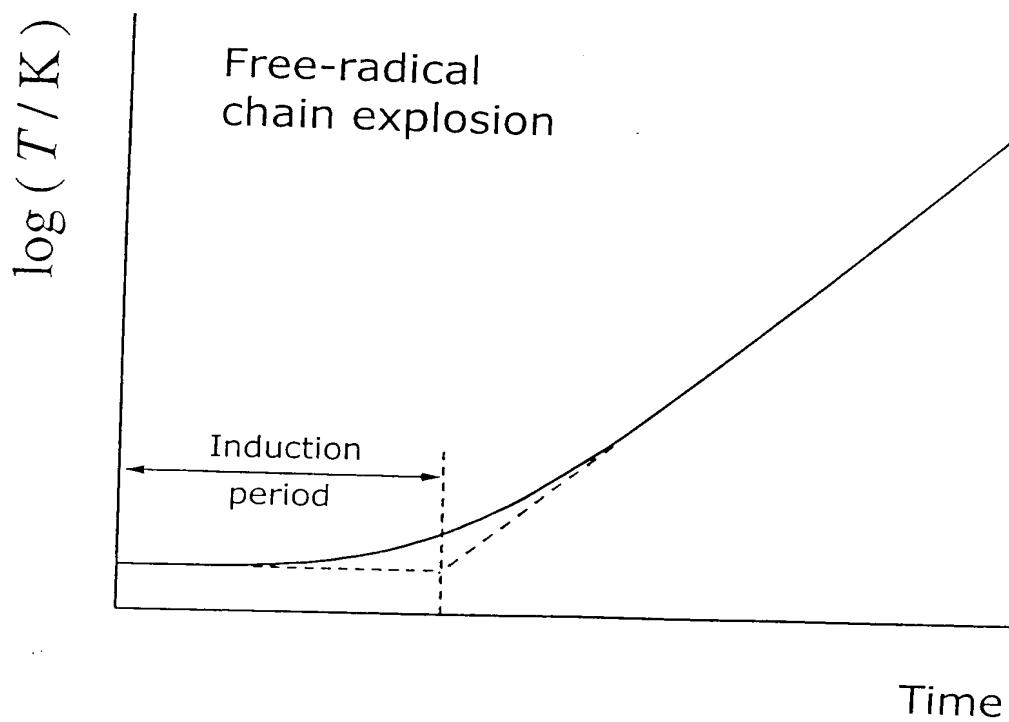


Fig. 2

Schematic course of temperature in a free-radical chain explosion (Warnatz et al., 1993)

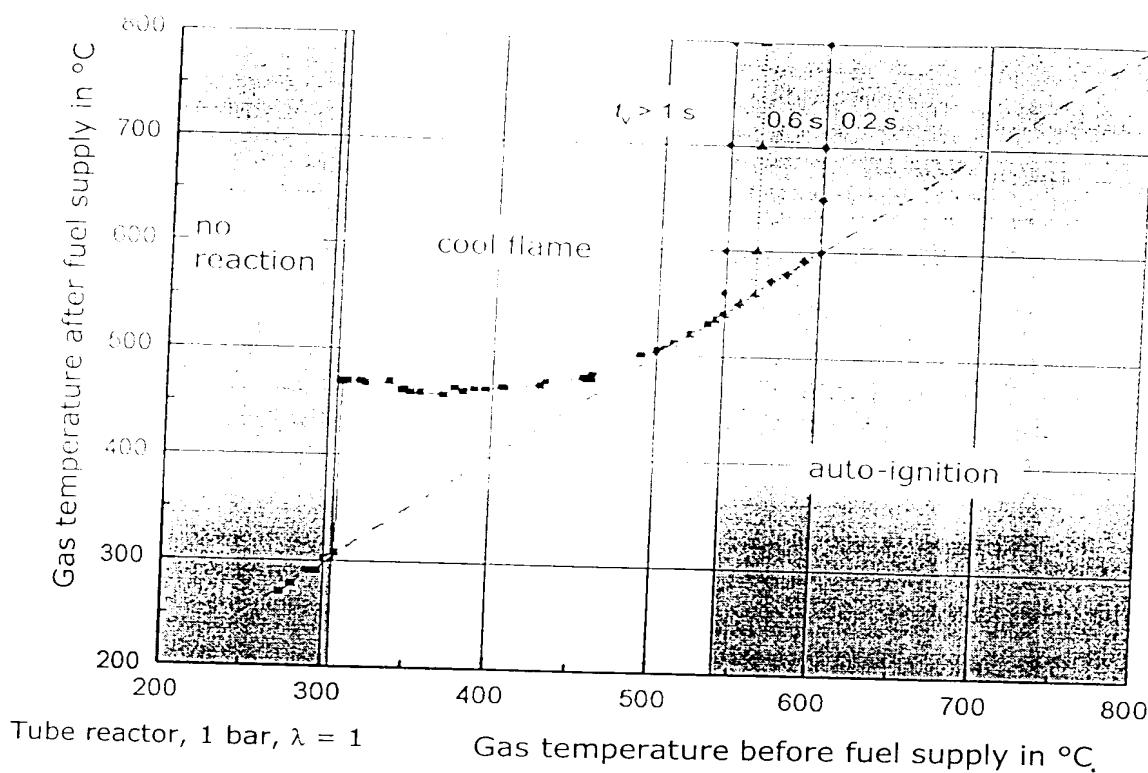


Fig. 3: Zones of the reactions for the atomization of fuel into a hot air stream (extra-light fuel oil, $p = 1$ bar, $\lambda = 1$)

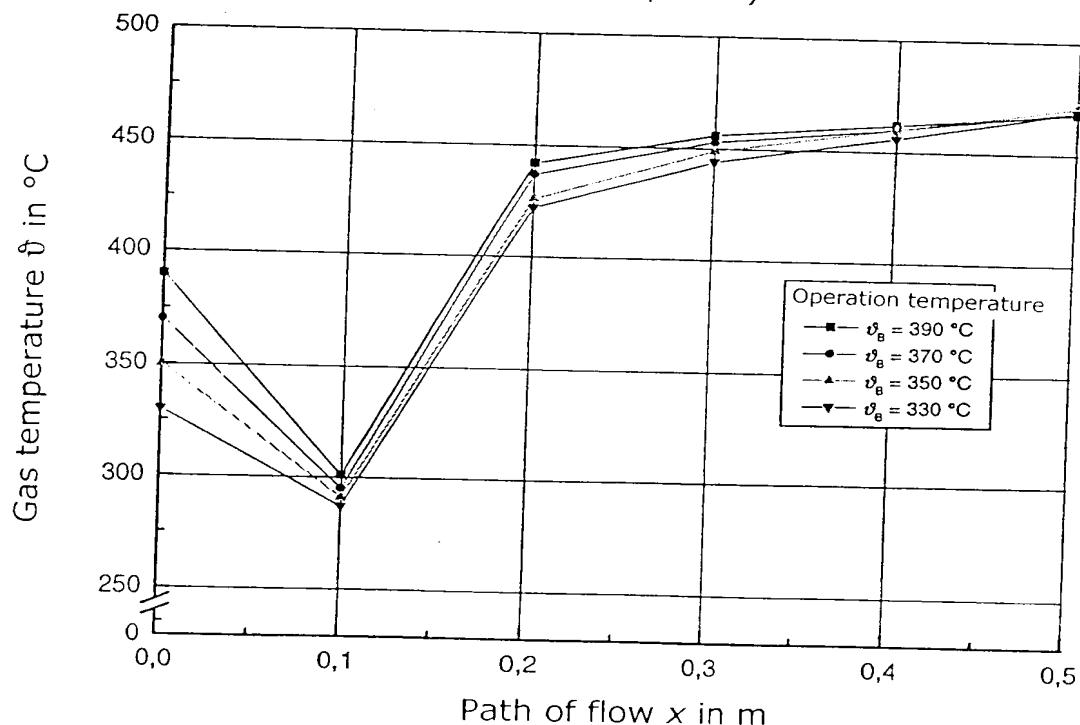


Fig. 4

Temperature course of a cool flame along the path of flow as a function of operation temperature (extra-light fuel oil, $p = 1$ bar, $\lambda = 1$, $t_v = 0.9$ s)

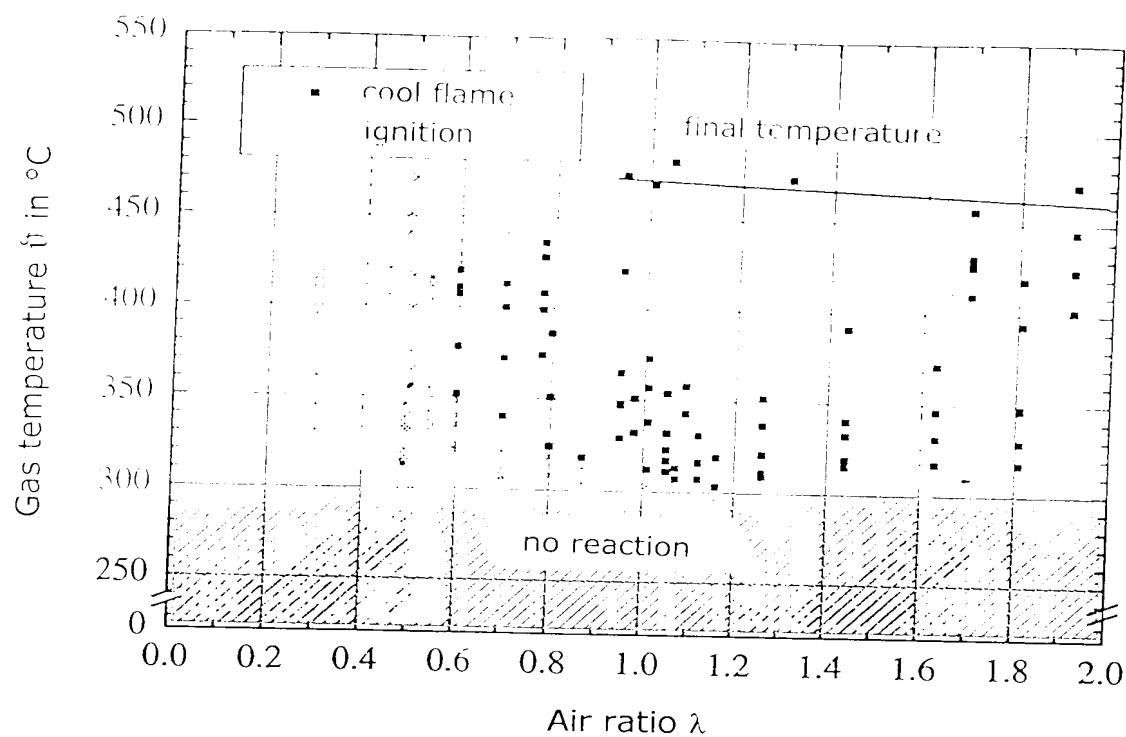


Fig. 5: Zones for starting conditions of the cool flame as a function of air ratio (extra-light fuel oil, $p = 1$ bar, $t_v = 1$ s)

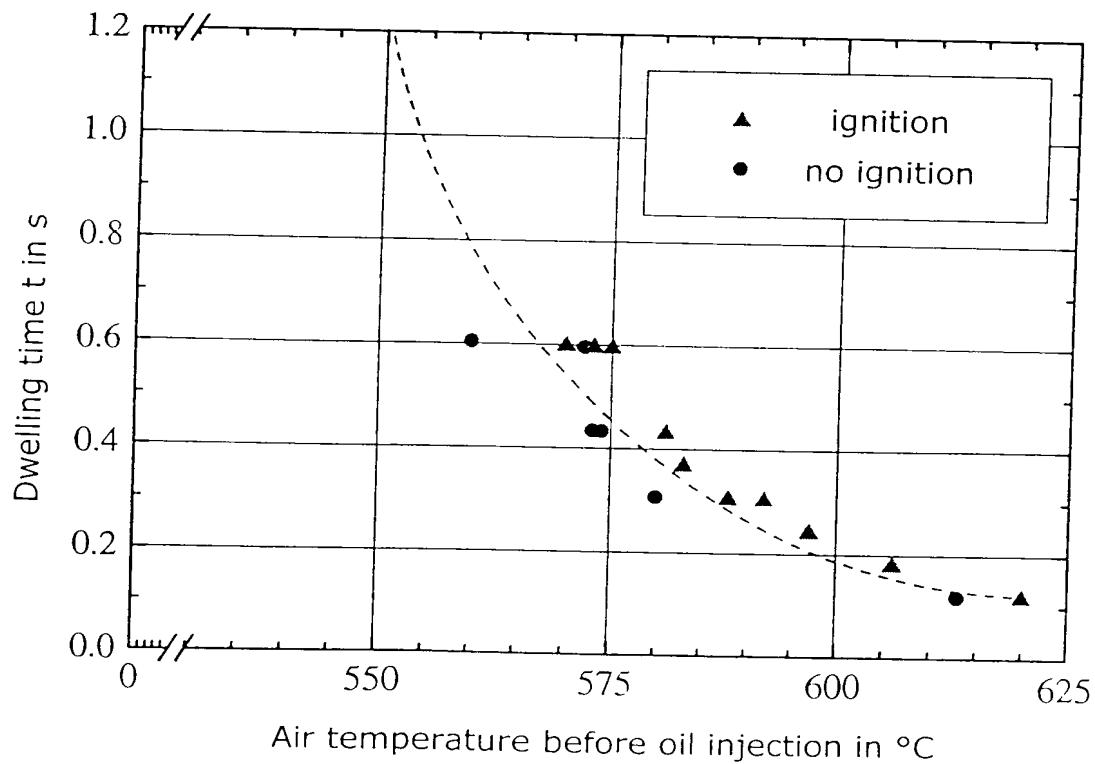


Fig. 6 Representation of ignition delay period of extra-light fuel oil as a function of the air temperature and dwelling time (pressure $p = 1$ bar)

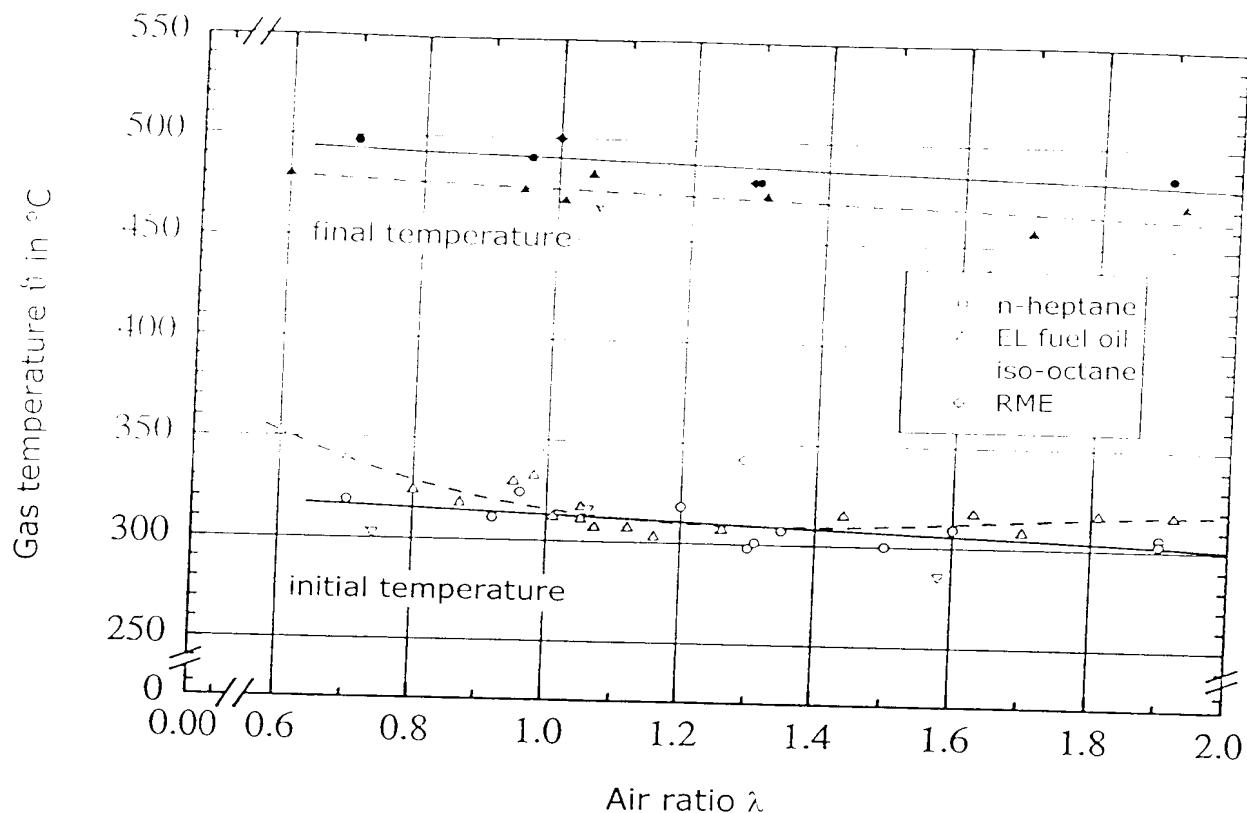


Fig. 7

Initial and final temperatures of the cool flame for different fuels ($p = 1$ bar)

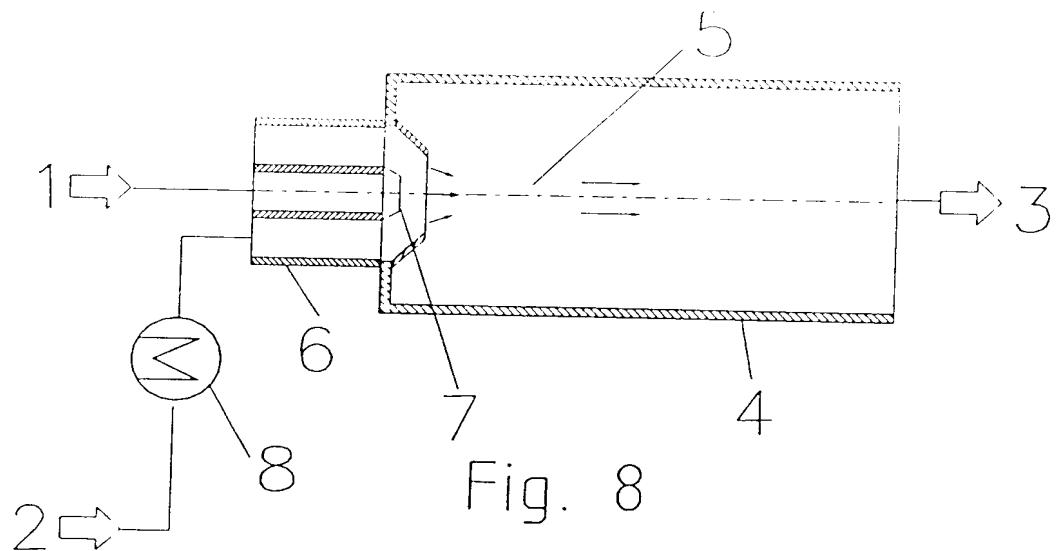


Fig. 8

Fig. 9 a)

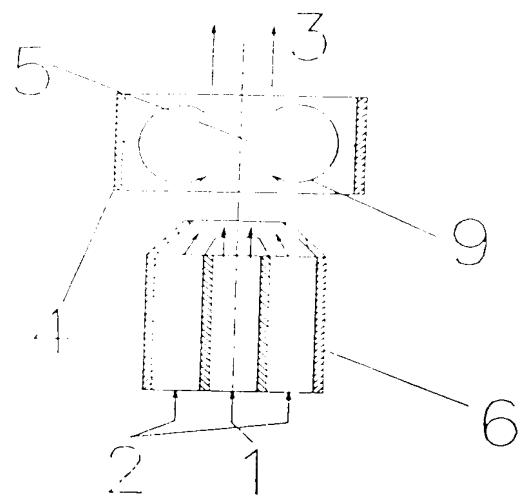


Fig. 9 b)

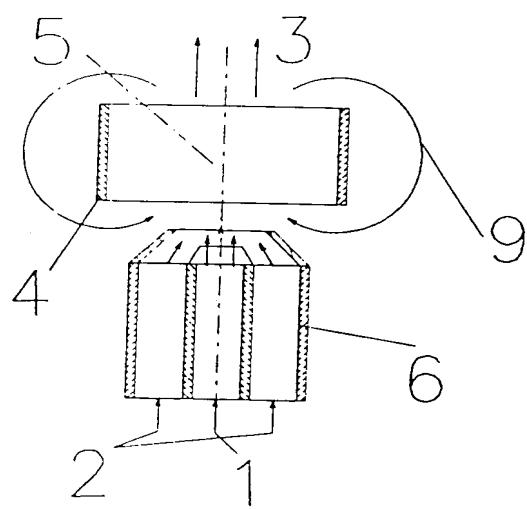
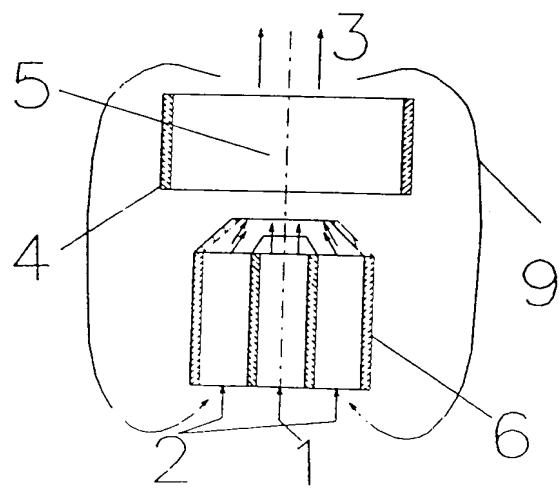
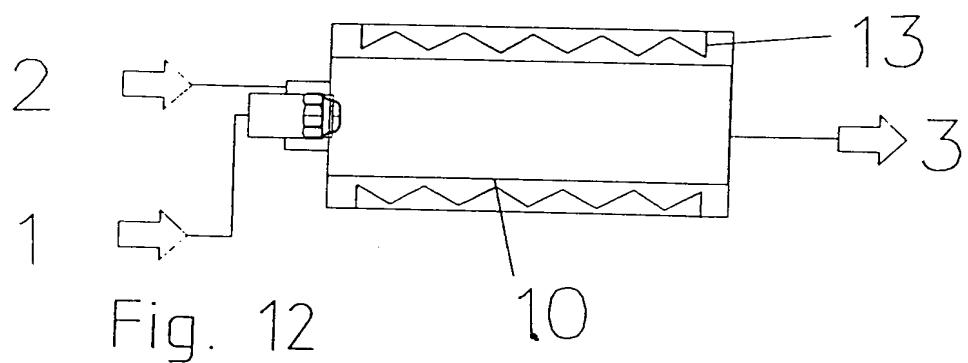
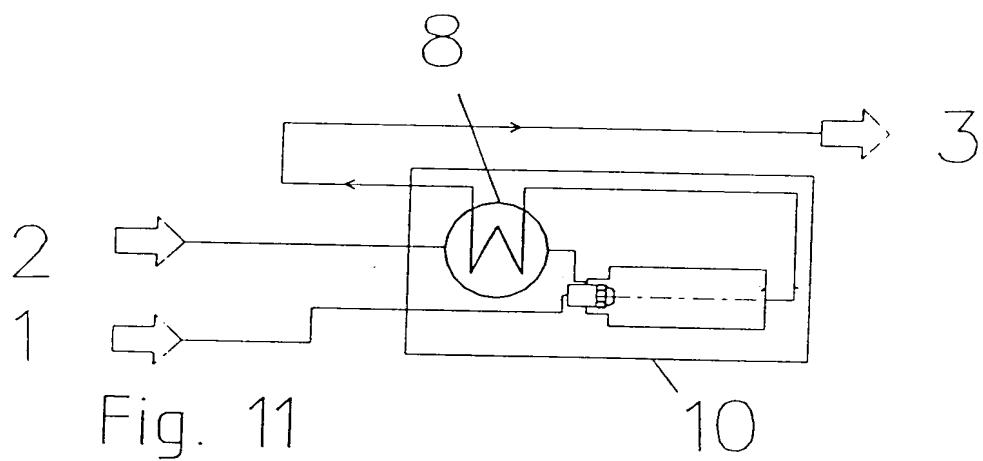
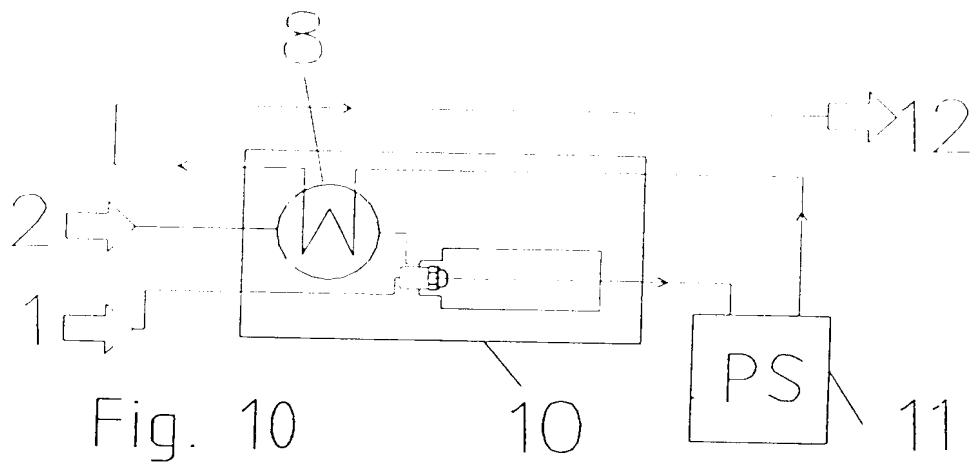


Fig. 9 c)





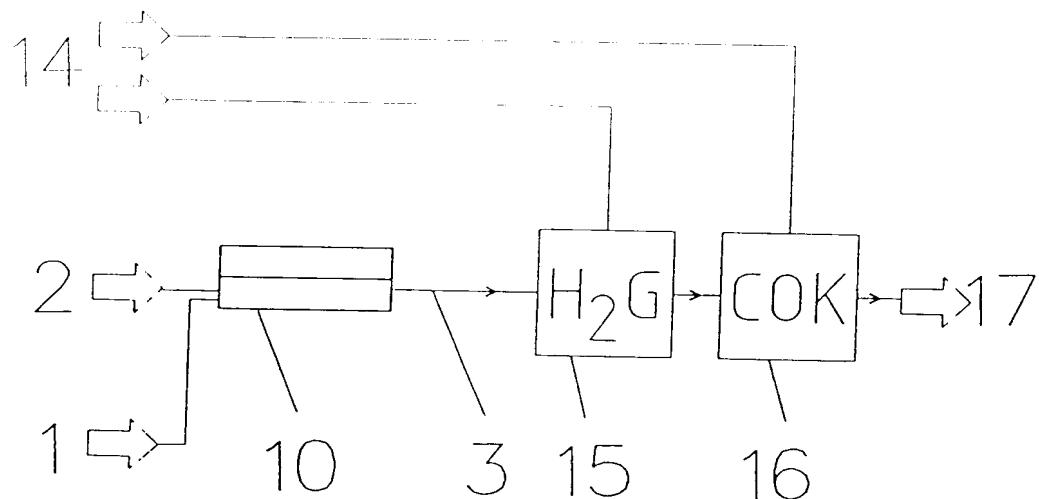


Fig. 13

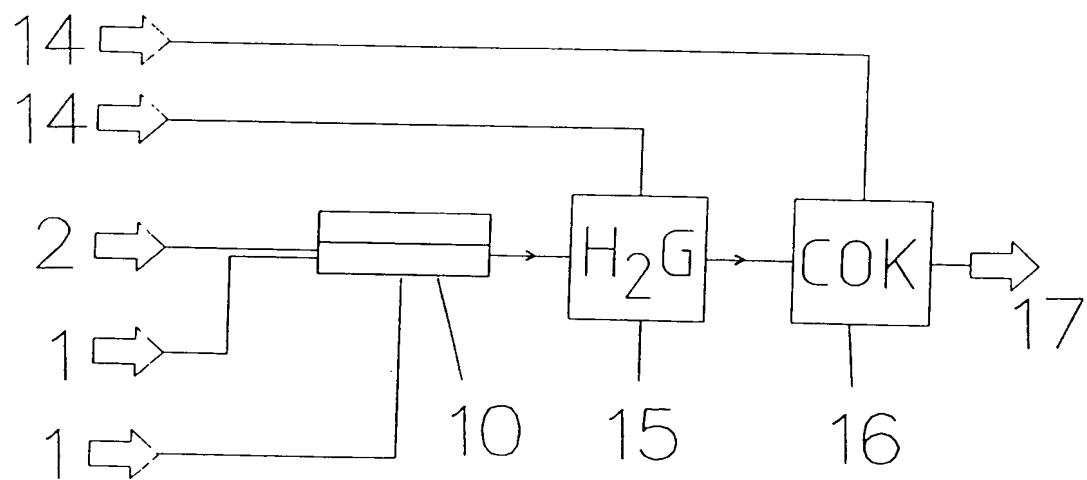
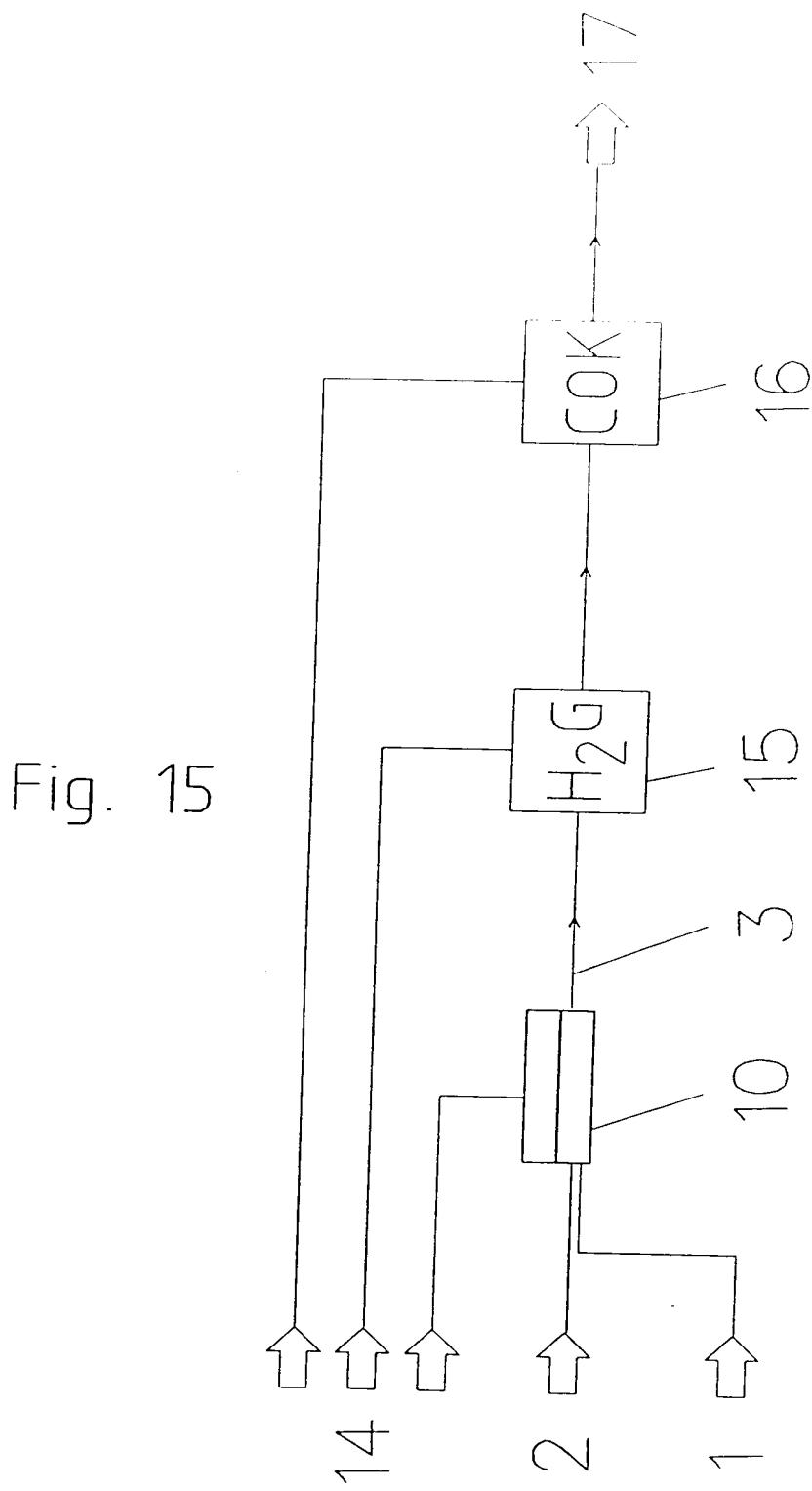


Fig. 14



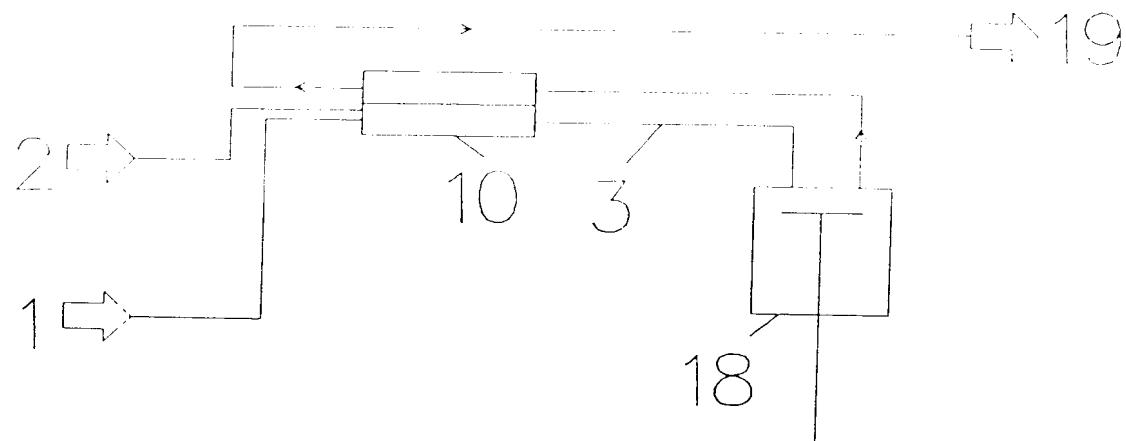


Fig. 16

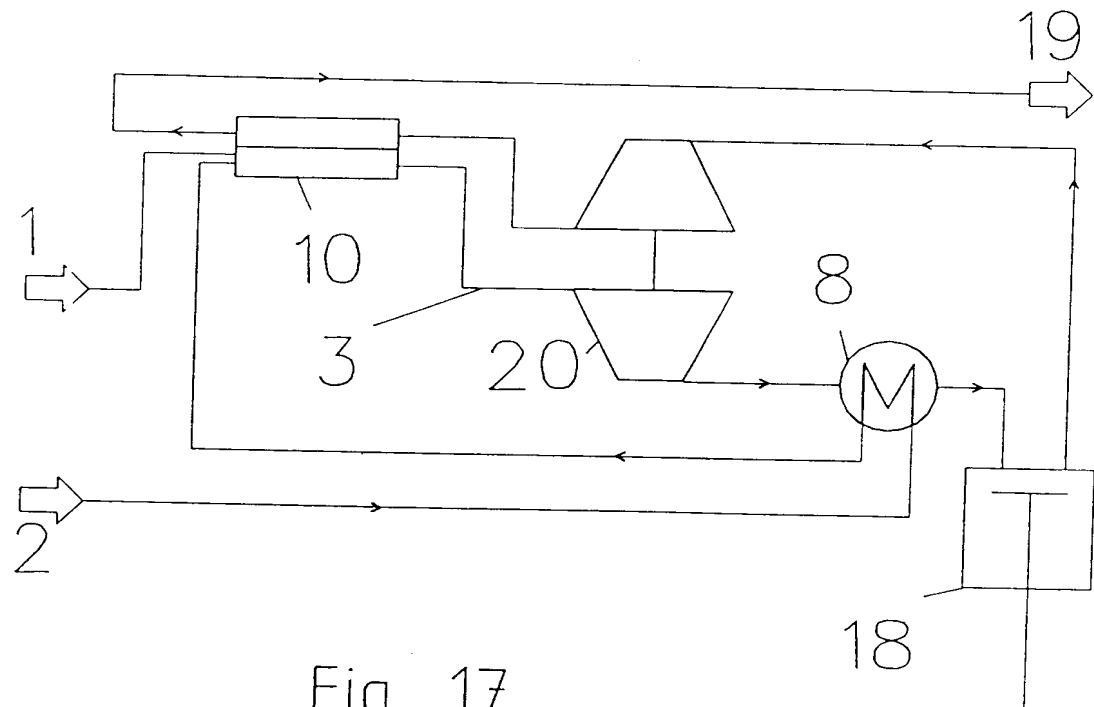


Fig. 17

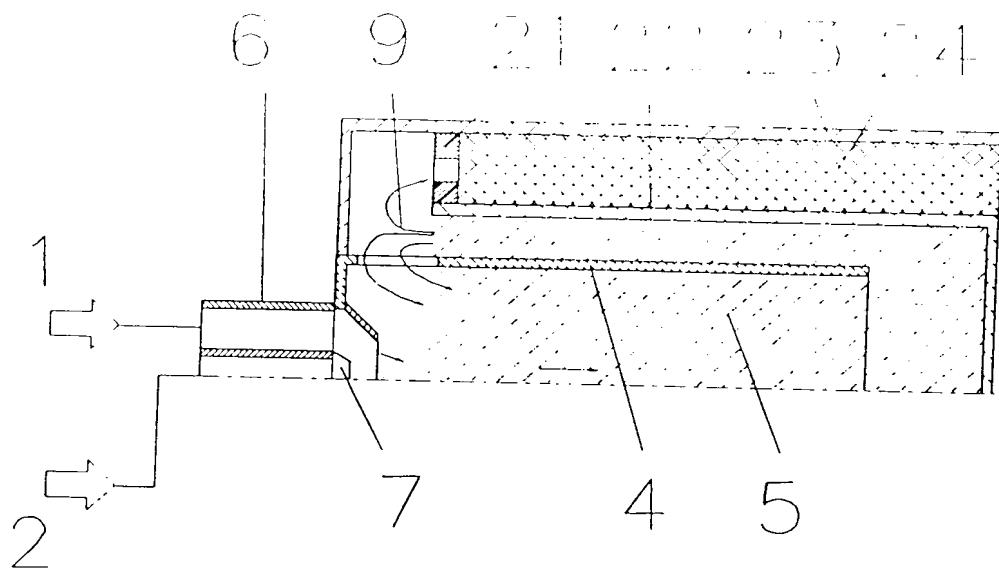


Fig. 18

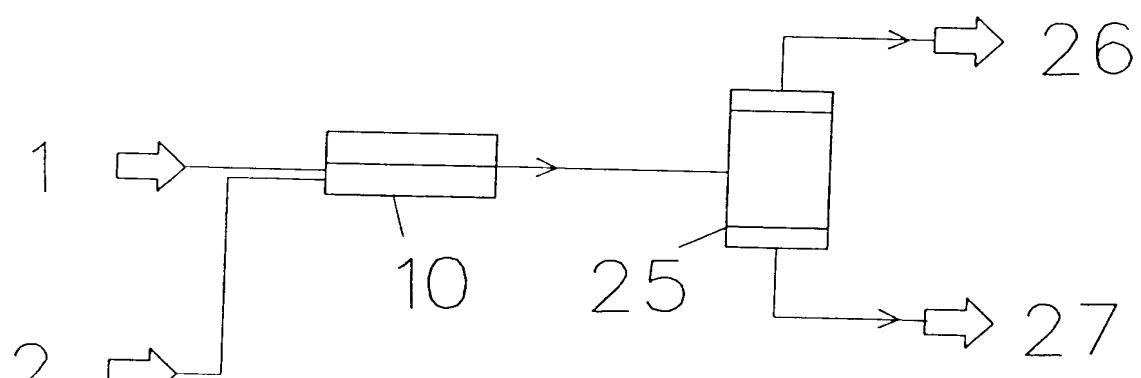


Fig. 19

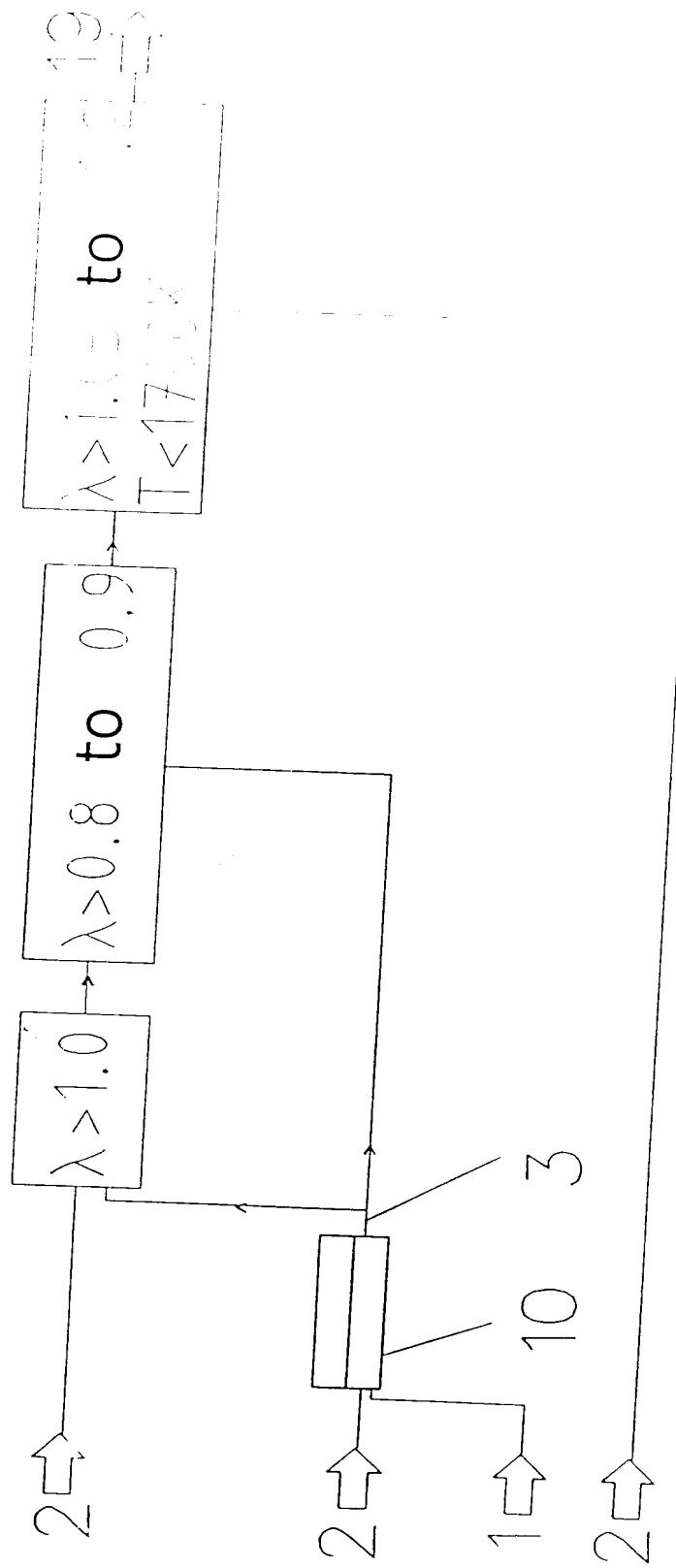


Fig. 20